

Nucleonica: Tips & Tricks

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nucleonica ... web driven nuclear science

Home username Login AutoLogin

Home

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Nucleonica [wiki]
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Karlsruhe Nuclide Chart
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NUCLEONICA HOT TOPICS

» **New! Virtual Cloud Chamber**
November 10, 2011
We announce the release of a new Nucleonica module: the Virtual Cloud Chamber. This powerful application is an online interactive simulation tool for investigating the

What is Nucleonica?

- » Nucleonica is an innovative professional and technical resource for knowledge creation and competence building for the worldwide nuclear science community. The portal has grown to become the leading online resource in the nuclear sciences and is particularly suitable for education and training of young scientists, engineers and technicians in the nuclear domain. Our applications enable researchers and specialists to make complex and precise calculations in state-of-the-art fashion.
- » Nucleonica is aimed at scientists, engineers and technical personnel working in the fields of nuclear power, health physics, radiation protection, nuclear and radiochemistry, decommissioning, nuclear medicine, etc. It can be used by professionals for everyday calculations, obtaining quick results and testing, validating and verifying complex computer models.
- » Nucleonica provides you with user-friendly access to the latest reference data from internationally evaluated nuclear data. A unique feature is the wide range of web-based nuclear science applications. A variety of social networking tools are provided for scientific collaboration. In addition, Nucleonica offers a range of

NUCLEAR NEWS

New telescope to guard Earth from killer asteroids
JUN 30 Some 500,000 asteroids are circulating near-Earth space and some of them may pose a real danger to our planet. But a US company says it plans to build a telescope that will be able to watch them. Read [...]

U.N. publishes report on Iran arms trade with Syria
JUN 30 UNITED NATIONS (Reuters) - A U.N. Security Council committee has published a report on Iranian sanctions violations, including shipments of weapons to Syria in breach of a U.N. ban on weapons exports [...]

More firms in danger of systems meltdown, claims risk expert
JUN 30 MORE than half of Irish companies are now at risk of an Ulster Bank-style systems meltdown because they are operating increasingly complicated IT systems -- but have failed to commit to the additional [...]

Japan discovers large rare earth deposits
JUN 30 Large and rich rare earth deposits, equaling at least 220 times the country's annual consumption, have been discovered near Minami-Torishima island in the Ogasawara Islands, a research

Nucleonica: Tips & Tricks

1. Using browser tabs
2. Using the wiki context sensitive Help
3. Accessing the Nucleonica blog
4. Increase font size in your browser
5. Using the datagrid / slider control to rearrange data
6. Increase the default size of graphs in your web browser
7. How to change your login username and password



The screenshot displays the Nucleonica website. At the top, there is a navigation bar with links: Home | Sitemap | About us | Privacy Statement | Legal Notice. The main header features the Nucleonica logo and the tagline "... web driven nuclear science". Below the header, there is a login section with fields for "username" and "password", and buttons for "AutoLogin" and "Login".

A sidebar on the left contains a "Welcome" section with links to "Free Access", "Premium Membership", "Our Customers", "Nucleonica [blog]", "Nucleonica [wiki]", "Forum", "Karlsruhe Nuclide Chart", "..... Online Shop", "Educational Resources", "Training Courses", "Ask an Expert", "FAQ", "About Us", "Contact", and "Impressum".

The main content area features a large image of a hand pointing at a colorful periodic table. Below this image, there is a section titled "What is Nucleonica?" with several paragraphs describing the portal's purpose and features.

On the right side, there is a "NUCLEAR NEWS" section with three articles:

- New telescope to guard Earth from killer asteroids**
JUN 30 Some 500,000 asteroids are circulating near-Earth space and some of them may pose a real danger to our planet. But a US company says it plans to build a telescope that will be able to watch them. Read [...]
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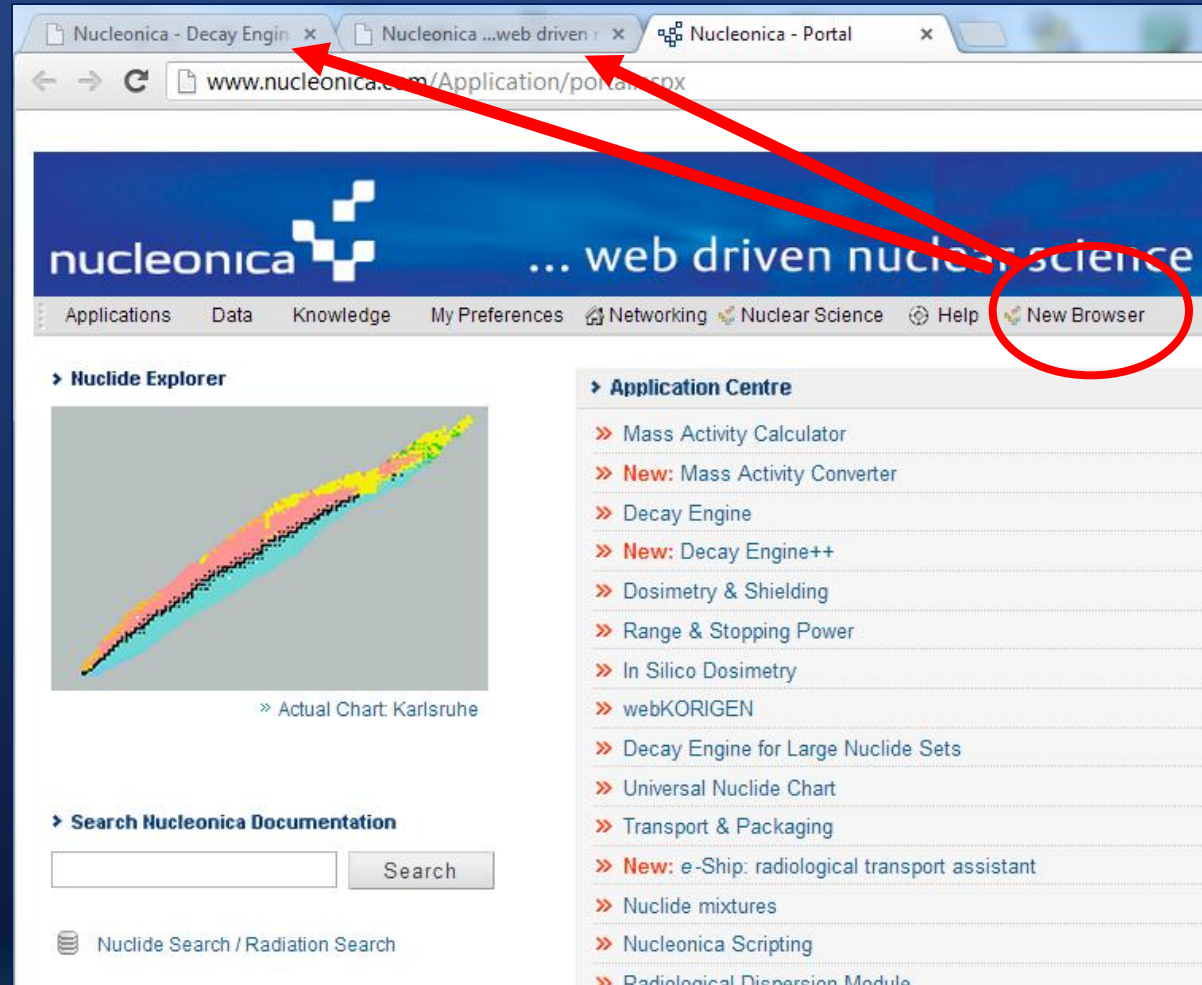
At the bottom left, there is a "NUCLEONICA HOT TOPICS" section with a link to "New! Virtual Cloud Chamber" dated November 10, 2011.

Nucleonica: Tips & Tricks

1. Open a new browser tab:

This allows you to have different applications / data pages in different tabs of the web browser.

Example: This example shows Nucleonica's nuclear science page in one of the tabs. By clicking on the New Browser link, new browser pages can be opened in different tabs. Here both the Decay Engine and Datasheets are shown in two additional tabs. The user can then move from one application to the other by selecting the appropriate tab.



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2. Use the wiki context sensitive Help

When using a particular application, the user can obtain information on, for example, how to use the application or find out the underlying theory, etc. by clicking on the Help button in the taskbar.

In the example shown, the Decay Engine application is being used. To find out how to use this application or information on the underlying theory, the user need only click on the Help button in the taskbar.

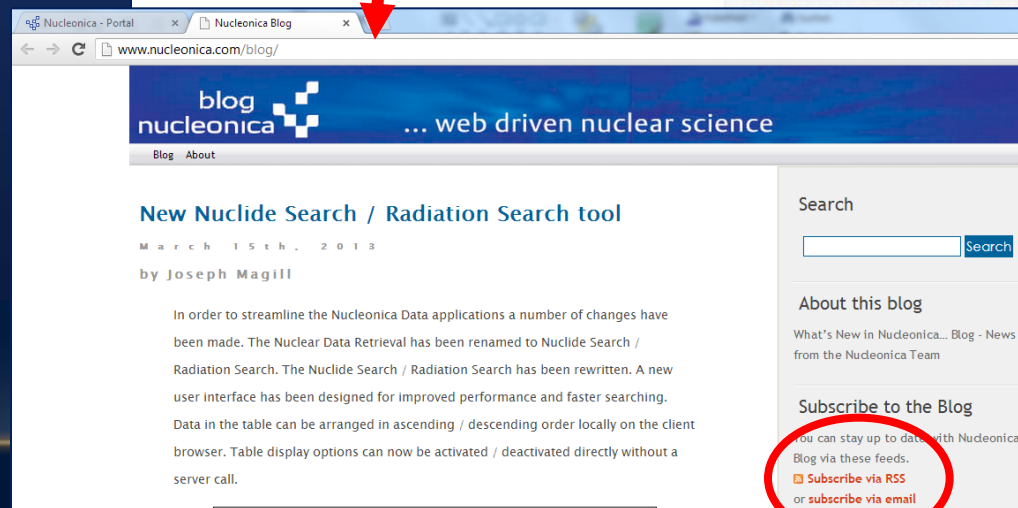
The wiki Help page for this application then opens in a new browser tab

The screenshot displays the Nucleonica website interface. At the top, the header reads "nucleonica ... web driven nuclear science". Below this, a navigation bar includes links for Applications, Data, Knowledge, My Preferences, Print, Networking, Nuclear Science, and Help. The Help button is circled in red, with a red arrow pointing to a secondary browser window. This secondary window shows the "Help:Decay Engine++" page, which is a wiki page titled "Help:Decay Engine++" with a "Level: Intermediate" and a note that "This page is under preparation. In the meantime". The page contains a "Contents" section with links to various topics, including "1 Using the Decay Engine++", "2 Results Grid", "3 Graphical Output", "4 Options", "5 Decay Tree", and "6 Mixture details". The main application window in the background shows the "Decay Engine++" interface for "63 Europium". It includes a "Current Chart: Karlsruhe" section, a "Mixture selector" with "Eu" and "152 m" selected, and a "Decay Engine" section with input fields for "Starting quantity" (1e6), "Final total quantity" (9.85E+02), "Unit" (becquerel), "Decay Time" (3.86E+00), and "Time Unit" (day). There are "Start" and "Reset" buttons, and a checkbox for "Show rescale tool".

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3. Access the Nucleonica blog

Users can keep informed of the latest developments on Nucleonica through the blog. This can be accessed from the Knowledge button in the taskbar. The blog is then opened in a new tab. Users can subscribe to the blog via email. As soon as new information is posted, the user will receive an alert by email.



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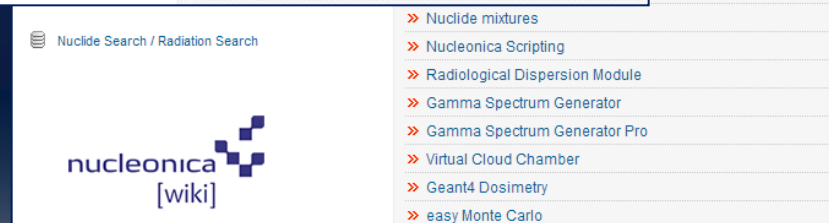
4. Increase font size in your browser

The font size in the browser window can be increased / decreased by pressing the key combination

Strg
or
Cntrl

+

+/-



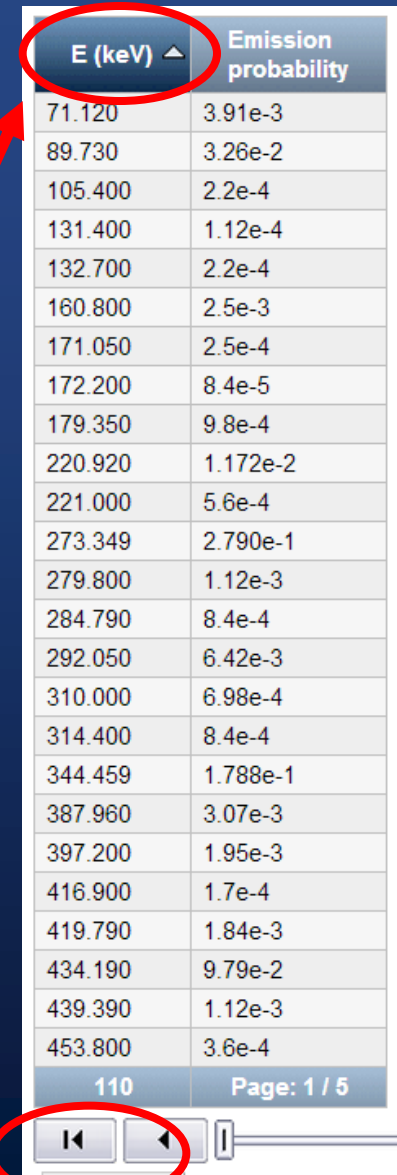
5. Using the datagrid / slider control to re-arrange data

We use the Datasheet++ Radiations to demonstrate this.

By default, the data is arranged by emission probability in ascending order (smallest value first).

To sort by energy E(keV), the user check the header in the table to arrange in ascending / descending order. A small triangle is shown which is either pointing up (for ascending order) or down (for descending order).

This action, however, will just rearrange the entries in the data page shown. To re-arrange the entire dataset, the user should then click on the scroll bar below the datagrid (on |< or <|). The entire dataset will then be re-arranged in ascending / descending order.

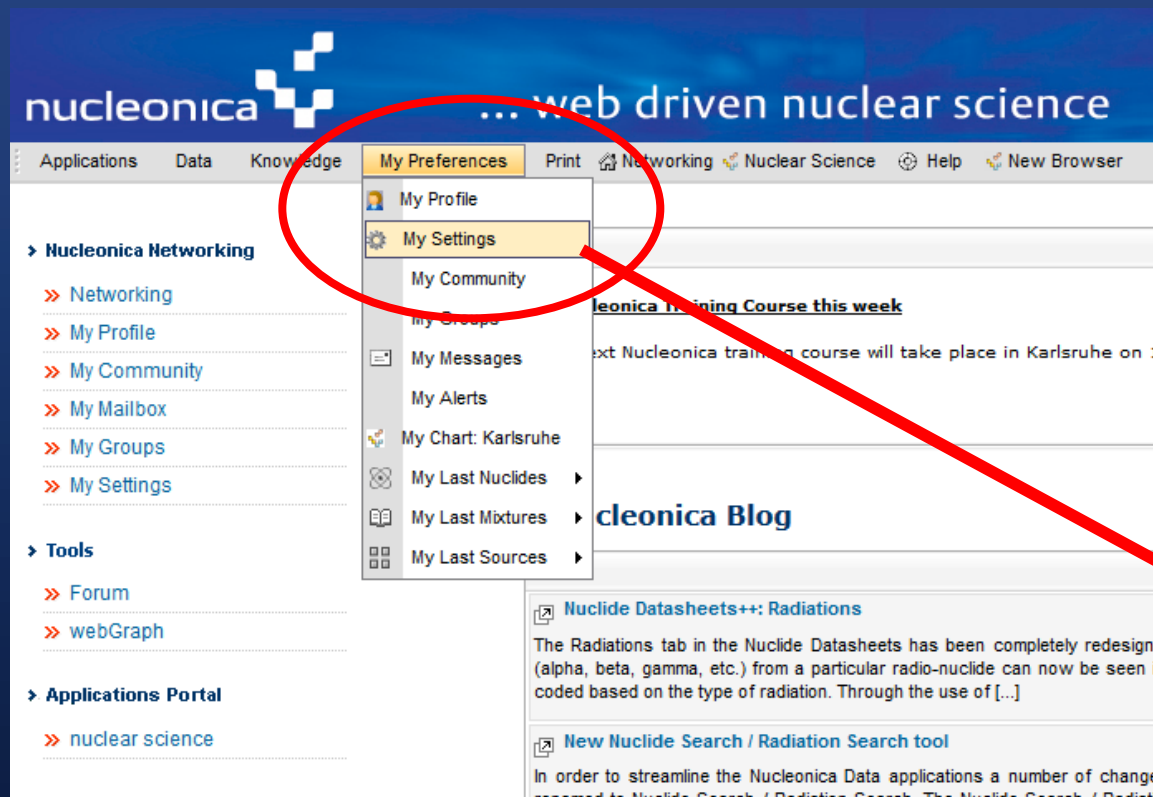


E (keV) ▲	Emission probability
71.120	3.91e-3
89.730	3.26e-2
105.400	2.2e-4
131.400	1.12e-4
132.700	2.2e-4
160.800	2.5e-3
171.050	2.5e-4
172.200	8.4e-5
179.350	9.8e-4
220.920	1.172e-2
221.000	5.6e-4
273.349	2.790e-1
279.800	1.12e-3
284.790	8.4e-4
292.050	6.42e-3
310.000	6.98e-4
314.400	8.4e-4
344.459	1.788e-1
387.960	3.07e-3
397.200	1.95e-3
416.900	1.7e-4
419.790	1.84e-3
434.190	9.79e-2
439.390	1.12e-3
453.800	3.6e-4

110 Page: 1 / 5

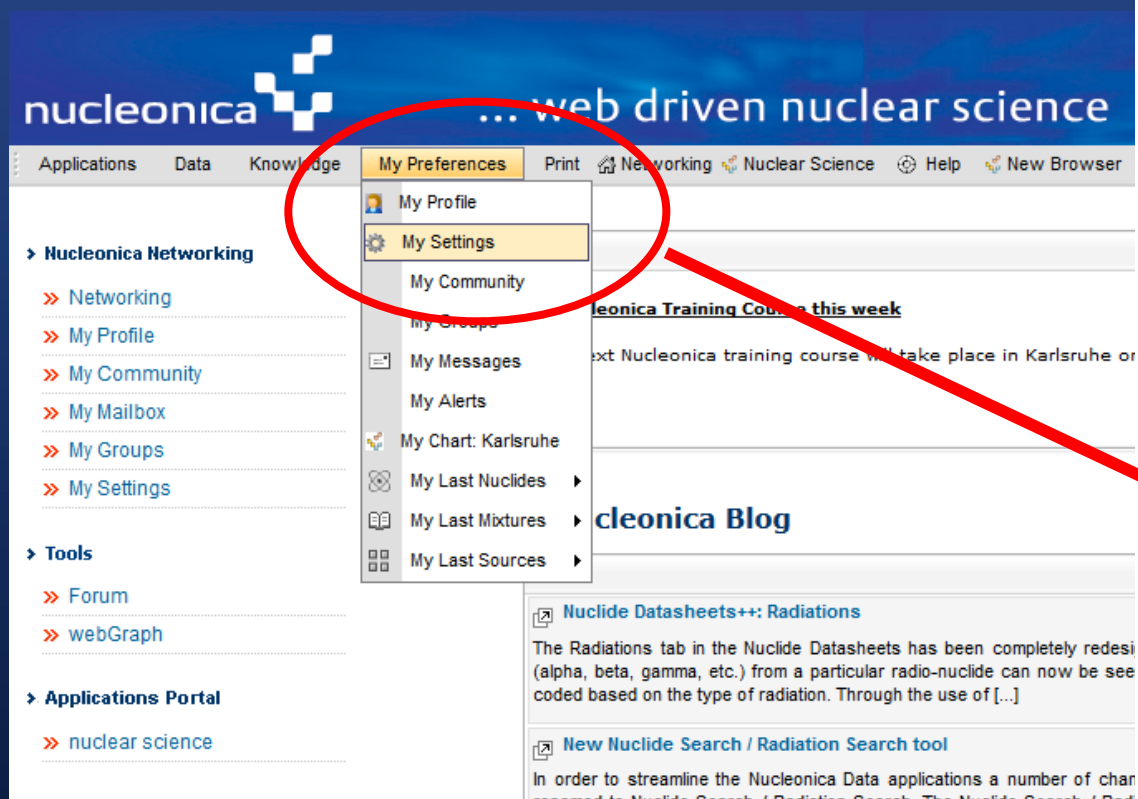
Navigation controls: |< <|

6. Increase the default size of graphs in your web browser

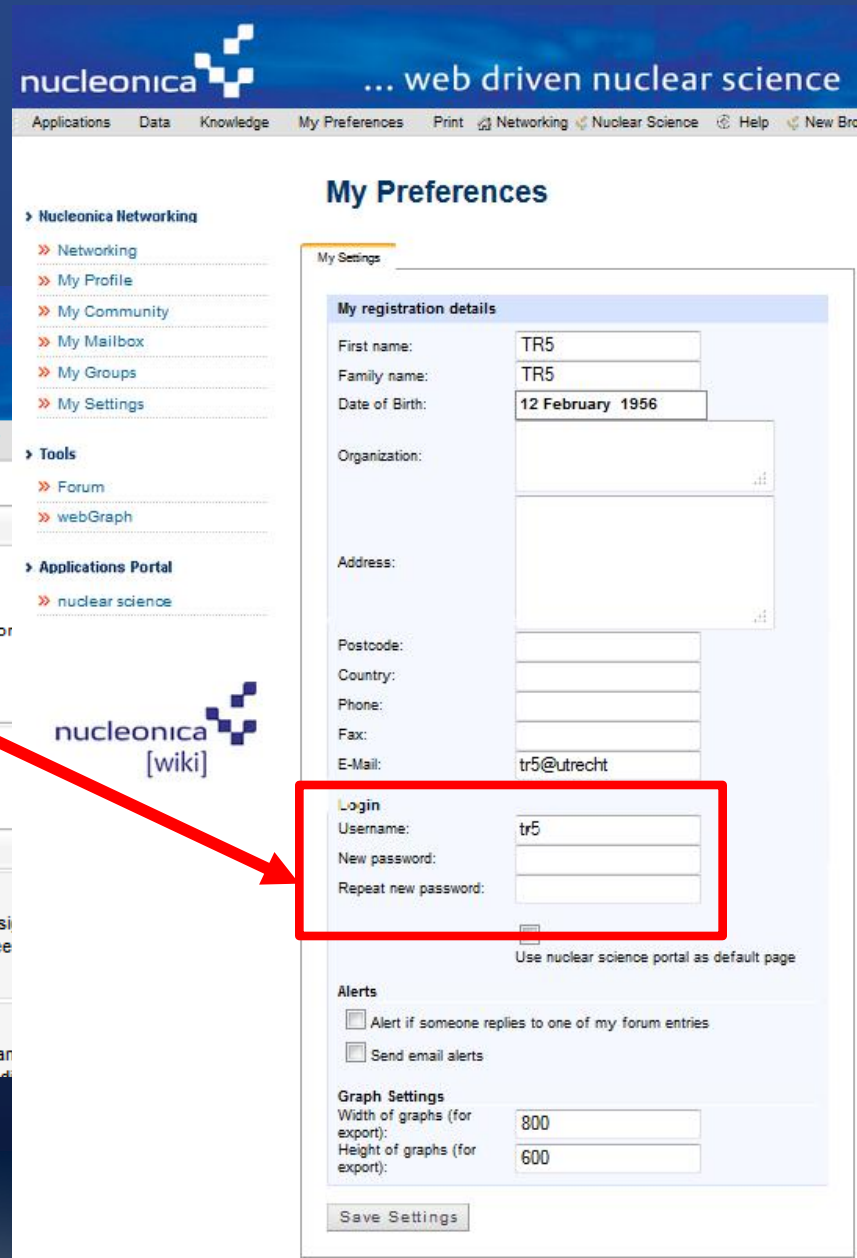


This screenshot shows the 'My Preferences' page on the Nucleonica website. The 'My Settings' section is highlighted with a red circle, and a red arrow points from the 'My Settings' link in the first screenshot to this section. The 'My Settings' section includes a 'My registration details' form with fields for First name, Family name, Date of Birth, Organization, Address, Postcode, Country, Phone, Fax, E-Mail, Username, New password, and Repeat new password. Below the registration details is a 'Login' section with fields for Username and Password. The 'Alerts' section includes checkboxes for 'Alert if someone replies to one of my forum entries' and 'Send email alerts'. The 'Graph Settings' section includes input fields for 'Width of graphs (for export):' (set to 800) and 'Height of graphs (for export):' (set to 600). A 'Save Settings' button is located at the bottom of the 'Graph Settings' section.

7. Change your login username and password



The screenshot shows the Nucleonica website interface. The top navigation bar includes 'Applications', 'Data', 'Knowledge', 'My Preferences', 'Print', 'Networking', 'Nuclear Science', 'Help', and 'New Browser'. The 'My Preferences' menu is open, showing options: 'My Profile', 'My Settings' (highlighted with a red circle), 'My Community', 'My Groups', 'My Messages', 'My Alerts', 'My Chart: Karlsruhe', 'My Last Nuclides', 'My Last Mixtures', and 'My Last Sources'. A red arrow points from the 'My Settings' option to the 'My Preferences' page on the right.



The screenshot shows the 'My Preferences' page. The left sidebar contains links for 'Nucleonica Networking' (Networking, My Profile, My Community, My Mailbox, My Groups, My Settings), 'Tools' (Forum, webGraph), and 'Applications Portal' (nuclear science). The main content area is titled 'My Preferences' and contains a 'My Settings' section. The 'My registration details' section includes fields for First name (TR5), Family name (TR5), Date of Birth (12 February 1956), Organization, Address, Postcode, Country, Phone, Fax, and E-Mail (tr5@utrecht). The 'Login' section, highlighted with a red box, includes fields for Username (tr5), New password, and Repeat new password. Below the 'Login' section are checkboxes for 'Alert if someone replies to one of my forum entries' and 'Send email alerts', and a 'Graph Settings' section with fields for Width of graphs (800) and Height of graphs (600). A 'Save Settings' button is at the bottom.